

Title (en)

METHOD OF PREPARING MATERIAL FOR LITHIUM SECONDARY BATTERY OF HIGH PERFORMANCE

Title (de)

VERFAHREN ZUR HERSTELLUNG VON MATERIAL FÜR HOCHLEISTUNGS-LITHIUMSEKUNDÄRBATTERIE

Title (fr)

PROCÉDÉ DE PRÉPARATION DE MATIÈRE POUR BATTERIE SECONDAIRE AU LITHIUM HAUTE PERFORMANCE

Publication

EP 2016637 B1 20180110 (EN)

Application

EP 07746404 A 20070508

Priority

- KR 2007002251 W 20070508
- KR 2006001739 W 20060510

Abstract (en)

[origin: WO2007129848A1] Provided is a lithium mixed transition metal oxide having a composition represented by Formula I of Li_xMyO_2 (M, x and y are as defined in the specification), wherein lithium ions intercalate into and deintercalate from mixed transition metal oxide layers ("MO layers") and some of MO layer-derived Ni ions are inserted into intercalation/deintercalation layers of lithium ions ("reversible lithium layers") thereby resulting in the interconnection between the MO layers. The lithium mixed transition metal oxide of the present invention has a stable layered structure and therefore exhibits improved stability of the crystal structure upon charge/discharge. In addition, a battery comprising such a cathode active material can exhibit a high capacity and a high cycle stability. Further, such a lithium mixed transition metal oxide is substantially free of water-soluble bases, and thereby can provide excellent storage stability, decreased gas evolution and consequently superior high-temperature stability with the feasibility of low-cost mass production.

IPC 8 full level

H01M 4/58 (2010.01); **C01G 53/00** (2006.01); **H01M 4/131** (2010.01); **H01M 4/48** (2010.01); **H01M 4/485** (2010.01); **H01M 4/50** (2010.01); **H01M 4/505** (2010.01); **H01M 4/52** (2010.01); **H01M 4/525** (2010.01); **H01M 10/052** (2010.01); **H01M 10/0525** (2010.01); **H01M 10/36** (2010.01)

CPC (source: EP)

C01G 53/50 (2013.01); **H01M 4/131** (2013.01); **H01M 4/485** (2013.01); **H01M 4/505** (2013.01); **H01M 4/525** (2013.01); **H01M 10/052** (2013.01); **C01P 2002/54** (2013.01); **C01P 2002/72** (2013.01); **C01P 2002/77** (2013.01); **C01P 2006/11** (2013.01); **C01P 2006/40** (2013.01); **C01P 2006/80** (2013.01); **H01M 10/0525** (2013.01); **Y02E 60/10** (2013.01); **Y02P 20/129** (2015.11)

Citation (examination)

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Designated contracting state (EPC)

BE DE FI FR GB SE

DOCDB simple family (publication)

WO 2007129848 A1 20071115; CN 101300696 A 20081105; CN 101300697 A 20081105; CN 101300698 A 20081105; CN 101300698 B 20110831; CN 102082261 A 20110601; CN 102983322 A 20130320; EP 2016636 A1 20090121; EP 2016636 A4 20100203; EP 2016637 A1 20090121; EP 2016637 A4 20100203; EP 2016637 B1 20180110; EP 2016638 A1 20090121; EP 2016638 A4 20100203; EP 2463941 A1 20120613; EP 2463941 B1 20200108; EP 2463942 A1 20120613; JP 2009536436 A 20091008; JP 2009536437 A 20091008; JP 2009536438 A 20091008; JP 5537929 B2 20140702; JP 5593067 B2 20140917; JP 5656402 B2 20150121; TW 200803019 A 20080101; TW 200804195 A 20080116; TW 200805751 A 20080116; TW 201218493 A 20120501; TW I356041 B 20120111; TW I360909 B 20120321; TW I360910 B 20120321; TW I463729 B 20141201; WO 2007129854 A1 20071115; WO 2007129860 A1 20071115

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KR 2007002230 W 20070507; CN 200780002216 A 20070507; CN 200780002227 A 20070509; CN 200780002247 A 20070508; CN 201010610494 A 20070508; CN 201210434392 A 20070507; EP 07746385 A 20070507; EP 07746404 A 20070508; EP 07746420 A 20070509; EP 12158212 A 20070507; EP 12158214 A 20070509; JP 2009509425 A 20070507; JP 2009509428 A 20070508; JP 2009509431 A 20070509; KR 2007002251 W 20070508; KR 2007002267 W 20070509; TW 100124789 A 20070510; TW 96116282 A 20070508; TW 96116510 A 20070509; TW 96116638 A 20070510